

AMENDMENTS TO THE DRAWINGS

The attached sheet(s) of drawings includes changes to FIGs. 1-3.

Attachment(s): Replacement sheet(s)

REMARKS

By this amendment, claims 1, 9, 27-29, 34, and 39-40 have been amended. Claims 2, 5, 10, 13, 15, 30, 33, 35, and 38 have been canceled. Claims 1, 3, 4, 6, 8-9, 11-12, 14, 16, 27-29, 31-32, 34, 36-37, and 39-40 are pending in the application. Applicant reserves the right to pursue the original claims and other claims in this and other applications.

The drawings stand objected and have been amended to address the concerns raised in the Office Action. Applicant respectfully requests that the objection to the drawings be withdrawn.

Claims 9, 11, 13-14, and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Eastman et al. (US 5,440,534). This rejection is respectfully traversed.

Claim 9 recites a position control method comprising, *inter alia*, "a first step of trying to read a predetermined data recorded ...; a second step of determining whether or not the predetermined data is readable; and a third step of, according to whether or not the predetermined data is readable, switching the criterion and trying again to read the predetermined data recorded in the guide grooves or in the region between two of the guide grooves." Claim 9 further recites that "the third step comprises a step of: if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal, wherein the predetermined data includes an address data" (emphasis added). Applicant respectfully submits that Eastman et al. does not disclose these limitations.

To the contrary, as admitted in the February 22, 2007 Office Action on page 17 for the rejection of claim 10, Eastman et al. does not disclose that “the third step comprises a step of: if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal.”

Furthermore, as admitted in the February 22, 2007 Office Action at page 5 (rejection of claim 7), Eastman et al. is configured only to work with CDs. Since Eastman et al. functions only with CDs and does not contemplate any other type of recording medium, the limitation is not inherent, and no determination of a type of recording medium is made at any time. Applicant respectfully submits that Eastman et al. does not disclose, teach, or suggest trying to read a predetermined data recorded on the recording medium when determining a type of the recording medium, as recited in claim 9.

Additionally, since a disk working at the same frequency but having a different format is not disclosed in Eastman et al., it is clear that the invention in Eastman et al. is not related to distinguishing between different types of recording media.

In the present invention, when the address information cannot be obtained, the polarity of the tracking error signal is reversed to switch to the criterion for controlling the position of the object lens. As a result, even for a recording medium of a low quality or a nonstandard recording medium, which are treated as invalid media when the address information cannot be obtained in the related art, it is possible to locate the object lens to the target position. Therefore, it is possible to precisely and stably control the position of the object lens relative to the recording medium.

Since Eastman et al. does not disclose all the limitations of claim 9, claim 9 and dependent claims 11, 13-14, and 16 are not anticipated by Eastman et al. Applicant respectfully requests that the 35 U.S.C. § 102(b) rejection of claims 9, 11, 13-14, and 16 be withdrawn and the claims allowed.

It should be noted that other art cited within the Office Action also does not teach the above-described features of the present invention. Iida et al. (US 2004/0240351) is not cited for the limitation of “the third step comprises a step of: if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal.”

Tanaka et al. (US 5,363,356) discloses a tracking polarity inverting circuit for selectively inverting a tracking polarity of the tracking servo circuit. However, in Tanaka et al., as shown in FIG. 2, at step S104, the tracking servo is closed by normal tracking polarity. In S105, the amplitude V_a of the RF signal is stored in the memory. In S106, the tracking polarity is inverted to obtain the current amplitude V_b of the RF signal. In S108, V_a is compared to V_b . In S110, when V_b is less than V_a , the tracking polarity is inverted to the normal tracking polarity to close the tracking servo.

Specifically, Tanaka et al. does not disclose the limitation of “if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal, wherein the predetermined data includes an address data” Nor does Tanaka et al. disclose that when the address information cannot be obtained, the

polarity of the tracking error signal is reversed to switch to the criterion for controlling the position of the object lens.

Claims 1, 3, 5-6, 8, 27-29, 31, 33-34, 36, and 38-40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Eastman et al. in view of Iida et al. (US 2004/0240351). This rejection is respectfully traversed. In order to establish a *prima facie* case of obviousness “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” M.P.E.P. §2142. Neither Eastman et al. nor Iida et al., even when considered in combination, teaches or suggests all of the limitations of independent claims 1, 27-29, 34, or 39-40.

Claim 1 recites a position control method wherein “a first step of trying to read a predetermined data recorded on the recording medium; a second step of determining whether or not the predetermined data is readable; and a third step of, according to whether or not the predetermined data is readable, switching a criterion for controlling the position of the object lens based on a tracking error signal, wherein the first step is performed when determining a type of the recording medium” Claim 1 further recites that “the third step comprises a step of, if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal, and wherein the predetermined data includes an address data.” (emphasis added). Claims 27-29, 34, and 39-40 recite similar limitations. Applicant respectfully submits that Eastman et al. and Iida et al., even when combined, do not teach or suggest these limitations.

To the contrary, as admitted in the February 22, 2007 Office Action on page 17 for the rejection of claim 10, Eastman et al. does not disclose that “the third step comprises a step of: if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal.”

It should be noted that, although not cited in the current rejection of these claims, Tanaka et al. discloses a tracking polarity inverting circuit for selectively inverting a tracking polarity of the tracking servo circuit. However, in Tanaka et al., as shown in FIG. 2, at step S104, the tracking servo is closed by normal tracking polarity. In S105, the amplitude V_a of the RF signal is stored in the memory. In S106, the tracking polarity is inverted to obtain the current amplitude V_b of the RF signal. In S108, V_a is compared to V_b . In S110, when V_b is less than V_a , the tracking polarity is inverted to the normal tracking polarity to close the tracking servo.

Specifically, Tanaka et al. does not disclose the limitation of “if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal, wherein the predetermined data includes an address data” Nor does Tanaka et al. disclose that when the address information cannot be obtained, the polarity of the tracking error signal is reversed to switch to the criterion for controlling the position of the object lens.

Moreover, claims 1, 27, 29, and 39 are directed toward a recording medium “without a guide groove.” Both Eastman et al. and Iida teach recording media with guide

grooves. (Eastman et al., col. 1, ln. 48-49; Iida, paragraph [0135]). The Examiner admits that any groove is considered to be a guide groove at page 6, ln. 19-21 and page 12, ln. 1-3.

Since Eastman et al. and Iida et al. do not teach or suggest all of the limitations of claims 1, 27-29, 34, and 39-40, claims 1, 29, 34, and 39-40 are not obvious over the cited combination. Claims 3, 5-6, 8, 31, 33, 36, and 38 depend, respectively, from independent claims 1, 27-29, and 34, and are patentable at least for the reasons mentioned above, and on their own merits. Applicant respectfully requests that the 35 U.S.C. § 103(a) rejection of claims 1, 3, 5-6, 8, 27-29, 31, 33-34, 36, and 38-40 be withdrawn and the claims allowed.

Claims 2, 4, 30, 32, 35, and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Eastman et al. in view of Iida et al., and further in view of Tanaka et al. (US 5,363,356). This rejection is respectfully traversed. Claims 2, 4, 30, 32, 35, and 37 depend, respectively, from claims 1, 29, and 34, and are patentable at least for the reasons mentioned above, and on their own merits. Applicant respectfully requests that the 35 U.S.C. § 103(a) rejection of claims 2, 4, 30, 32, 35, and 37 be withdrawn and the claims allowed.

Claims 10 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Eastman et al. in view of Tanaka et al. (US 5,363,356). This rejection is respectfully traversed. Claim 12 depends from claim 9, and is patentable at least for the reasons mentioned above, and on its own merits. Claim 10 has been canceled. Applicant respectfully requests that the 35 U.S.C. § 103(a) rejection of claims 10 and 12 be withdrawn and the claims allowed.

In view of the above, Applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

By 

Mark J. Thronson

Registration No.: 33,082

Rachael Lea Leventhal

Registration No.: 54,266

DICKSTEIN SHAPIRO LLP

1825 Eye Street NW

Washington, DC 20006-5403

(202) 420-2200

Attorneys for Applicant

Attachment(s)